

MODELS: Cessna C-38, 4 PCL-SM

T.C. NUMBER: T.C. 668

(May be converted to Model C-165 in accordance with NOTE 7 of Aircraft Specification for that model.)

Engine	Warner Super Scarab Series 50 or 50A
Engine limits	For all operations, 2050 rpm (145 hp)
Propeller	Maximum permissible diameter - Landplane 90 in., Seaplane 96 in.
Airspeed limits	Landplane: Level flight or climb - 164 mph True Ind. Glide or dive - 215 mph True Ind. Flaps extended (90 degrees down) - 110 mph True Ind. Seaplane: Level flight or climb - 146 mph True Ind. Glide or dive - 195 mph True Ind. Flaps extended (70 degrees down) - 108 mph True Ind.
Fuel	35 gallons (2 tanks, 1 in each wing at 17-1/2 gallons) (+61)
Oil	3.5 gallons (+4)
No. passengers	3 - Front (+34), rear (+68)
Baggage	64 lbs. (+82)
Maximum weight	Landplane - 2350 lbs. Seaplane - 2500 lbs.
C.G. limits	(+41.2) and (+49.3) (Landplane) (+41.5) and (+49.8) (Seaplane)
Spec. basis	Type Certificate No. 668
Serial Nos.	401 to 449, inclusive, manufactured prior to 8/27/42, eligible. Approval expired as of that date. Serial Nos. 401 to 405, inclusive, must have baggage support (Drawing C38641)

EQUIPMENT: (Datum is centerline bulkhead No. 1 (firewall)) (* Means net increase) (See NOTE 4)

Class I:

A. Landplane:		
101. Engine cowl (NACA type with baffles)	24 lbs.	(-16)
102. Propeller - fixed pitch wood	27 lbs.	(-27)
103. 6.50-10 wheels (Warner M-3270)	57 lbs.	(+28)
104. 8 in. streamline tail wheel	4 lbs.	(+243)
105. Battery (Exide 6TS-7-1) - aft of baggage compartment	26 lbs.	(+97)
106. Battery box	7 lbs.	(+97)
107. Leveling blocks		
108. Carburetor heater (Drawing C38912)	3 lbs.	(-9)
B. Seaplane: Items 101, 105, 106, 107, 108 PLUS:		
151. Seaplane fin (Drawing 37451)	6 lbs.	(+240)
152. Edo 44-2425 floats with water rudder	329 lbs.	(+53)
153. Propeller - fixed pitch metal - Curtiss 55511	47 lbs.	(-27)

Class II:

201. Starter (Eclipse Y-150)	23 lbs.	(+0)
202. Camera apertures (Drawing C37908-2, -4, -5)	3 lbs.	(+56)
203. Navigation lights (Grimes C)	2 lbs.	(+70)
204. Generators		
(a) Wind-driven (Hodges H-12V)	10 lbs.	(+31.5)
(b) Engine-driven (Hodges H-12V)	14 lbs.	(-4)
(c) Engine-driven (Bosch LE70-12R5)	16 lbs.	(-4)
(d) Engine-driven (Eclipse G-15A-15V)	21 lbs.	(-4)
205. Flares		
(a) Three 1-1/2 minute electric	18 lbs.	(+92)
(b) Five 1-minute electric	15 lbs.	(+92)
206. Landing lights		
(a) (Grimes ST-250)	11 lbs.	(+56)
(b) (Grimes ST-1000) (Lt. only)	7 lbs.	(+56)
207. 22x10-4 wheels and tires (Goodyear 4MBA)	69 lbs.	(+28)
208. 21 in. streamline wheels (Autofan CS100) with 21 in. streamline tires	60 lbs.	(+28)
209. Pilot hatch (Drawing C37512)	3 lbs.	(+36)
210. Engine shielding	5 lbs.	(-13)
211. Cabin heater (Drawing C37915)	5 lbs.	(-9)

212.	Extra instruments	20 lbs.	(+15)
213.	Propellers		
	(a) Fixed pitch metal - Curtiss 55511 (Landplane)	47 lbs.	(-27)
	(b) Adj. metal - Hamilton Standard hub 7056, blades 19B-1/2-16 or 19B-1/2-17. Diameter 7'2" maximum, 7'1/4" minimum.	63 lbs.	(-27)
214.	Wheel streamlines (Drawing C37353)	27 lbs.	(+28)
215.	Emergency exit (Drawing C37511)	5 lbs.	(+53)
216.	Radio		
	(a) Superior 8B receiver (Drawing C38901-1)	8 lbs.	(+34)
	(b) RAC AVD-7D, E, F, G receiver (Drawing C38901-2)	31 lbs.	(+34)
	(c) RAC AVR-10 receiver	9 lbs.	(+23) or (+31)
	(d) Superior transmitter (Drawing C38901-5)	11 lbs.	(+34)
	(e) Dynamotor (Drawing C38901-3)	15 lbs.	(+62)
	(f) Antenna reel (Drawing C38901-4)	2 lbs.	(+45)
217.	10 gallon cabin fuel tank (Drawing C38764)	8 lbs.	(+49.5)
218.	17-1/2 gallon cabin fuel tank (Drawing C38764)	12 lbs.	(+51)
219.	Photographer's seat (1 person only) (Drawing C38602)	8 lbs.	(+82)
220.	Camera support (Drawing C37908-3) (Any camera up to 62 lbs. in weight may be installed according to Drawing C37908-3. Inspector should list type, weight and make of camera; obtain a weight and balance report both with and without camera installed.)	2 lbs.	(+55)
221.	Heavy duty landing gear		
	(a) Tail wheel fork (9 lbs.)	1 lb.*	(+244)
	(b) Main gear (100 lbs.)	10 lbs.*	(+28)
222.	Skis	Use actual weights	
	(a) Wien Alaska W-2500		
	(b) Wien Alaska W-2500-A		

NOTE 1. Eligible for export to all countries except as follows, subject to provisions of MOP 2-4:

(a) Canada

- Landplane and seaplane - eligible.
- Skiplane - not eligible. However, structure (Drawing C38357, Rev. A) complies with Canadian requirements for ski gear with maximum pedestal height of 14 in. and tread of 79 in. with gear in half-deflected position. Tail skid structure satisfactory for installation of tail ski on tail wheel fork and axle assembly (Drawing C38383).

NOTE 2. Relief valve in hydraulic flap operating system must be set to open at 180 lbs. per square inch.

NOTE 3. Control surface movement:

- Rudder - 25 degrees from centerline of airplane.
- Elevator - 25 degrees up, 23-1/2 degrees down.
- Aileron - 25 degrees up, 25 degrees down.
- Tab - 6.5 degrees up, 22 degrees down.
- Flap - see placard speeds.

NOTE 4. Weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be submitted with original inspection report and each subsequent report covering change in equipment.